DEPARTMENT OF ENERGY FY CONGRESSIONAL BUDGET REQUEST ENERGY CONSERVATION

Proposed Appropriation Language

For necessary expenses in carrying out energy conservation activities, [\$691,701,000] \$837,515,000, to remain available until expended, [including, notwithstanding any other provision of law, \$64,000,000, which shall be transferred to this account from amounts held in escrow under section 3002(d) of Public Law 95-509 (15 U.S.C. 4501(d)):] of which \$25,000,000, shall be derived by transfer from available unobligated balances in the Biomass Energy Development account: *Provided*, That [\$166,000,000] \$191,000,000 shall be for use in energy conservation programs as defined in section 3008(3) of Public Law 99-509 (15 U.S.C. 4507): *Provided further*, That notwithstanding section 3003(d)(2) of Public Law 99-509 such sums shall be allocated to the eligible programs as follows: [\$133,000,000] \$154,000,000 for weatherization assistance grants and [\$33,000,000] \$37,000,000 for State energy conservation grants. (*Department of the Interior and Related Agencies Appropriations Act, 1999, as included in Public Law 105-277, section 101(e).*)

EXPLANATION OF CHANGE

Deletes funding amounts which had specific application to FY 1999 and includes the appropriate funding amounts for FY 2000. Includes new language concerning the use of available funds from another account.

DEPARTMENT OF ENERGY FY 2000 CONGRESSIONAL BUDGET REQUEST ENERGY EFFICIENCY AND RENEWABLE ENERGY ENERGY CONSERVATION

EXECUTIVE BUDGET SUMMARY

Mission

The Energy Efficiency and Renewable Energy (EERE) program supports the Department of Energy's strategic objectives of increasing the efficiency and productivity of energy use, while limiting environmental impacts; reducing the vulnerability of the U.S. economy to disruptions in energy supplies; ensuring that a competitive electricity generation industry is in place that can deliver adequate and affordable supplies with reduced environmental impact; supporting U.S. energy, environmental, and economic interests in global markets; and delivering leading-edge technologies that are critical to the nation. EERE activities funded under the Energy Conservation Appropriation are designed to improve the fuel economy of automobiles and other vehicles; and to increase the productivity of the nation's most energy-intensive and polluting industries; to improve the energy efficiency of buildings and appliances; and to increase the energy efficiency of the federal government.

EERE's programs work in cost-shared partnerships with the nation's industries, utilities, states, cities and the public to advance the development and facilitate the deployment of energy efficiency technologies. By meeting these goals, EERE provides tools for the nation, its industries, and its citizens to use energy more efficiently, with fewer financial and environmental costs. By accelerating the efficiency of the nation's energy use, EERE's programs help to strengthen the economy, improve the environment, and ensure a more secure future.

Strategy

The EERE strategic goals reflect the Administration's emphasis on Federal energy R&D for delivering significant benefits to the nation. In its 1997 review of the national energy R&D portfolio, the President's Committee of Advisors on Science and Technology recommended increases in a number of energy efficiency R&D programs. The Committee noted that energy efficiency technologies produce near-term and rapidly expanding public benefits, including air emissions reductions, reduced dependence on imported oil, and lower costs to households and firms. According to the Committee's analysis, R&D investments in energy efficiency have contributed to efficiency improvements that save U.S. consumers approximately \$170 billion per year. The Committee called for significant expansion of energy efficiency programs in order to meet the energy challenges and opportunities of the 21st century.

EERE plays a leading role in implementing several Administration priorities. Most Federal research and development for the Partnership for a New Generation of Vehicles is supported by the EERE Office of Transportation Technologies, working with automobile manufacturers and

their suppliers to develop an 80-mpg family sedan by 2004 at a cost, performance, safety and comfort level similar to today's models. The Industries of the Future program, implemented by the EERE Office of Industrial Technologies, allows the nation's most energy-intensive industries to share in the planning, research, and development of industrial technologies that reduce energy costs, resource waste, and the burdens of pollution, for a more productive and environmentally sound manufacturing base. The EERE Office of Buildings Technology, State and Community Program's Building America Program supports the energy goals of the Partnership for Advancing Technology in Housing (PATH), a Presidential initiative that brings Federal agencies and industry together to accelerate the creation and widespread use of advanced technologies to radically improve the quality, affordability, disaster resistance, and environmental and energy efficiency of the nation's housing. The President has also placed emphasis on the improving the energy efficiency and environmental quality of the Federal sector, and the EERE Federal Energy Management Program (FEMP) has developed contractual mechanisms to attract substantial private sector funds to improve the energy efficiency of Federal facilities. The President's Million Solar Roofs Initiative, funded under the Energy and Water Development Appropriation, is aimed at facilitating the installation of photovoltaic and solar hot water systems on one million buildings across the nation by 2010.

During the 20th century, our nation's economy has depended heavily on imported fossil fuels. Biomass -- a renewable alternative -- represents a tremendous, largely untapped, domestic resource for our energy future. By investing in a bioenergy industry today, we can cultivate and harness these renewable resources to fuel our cars, power our homes and industries, and supply our chemical needs in the 21st century. The Department of Energy, along with other federal agencies and private partners, is launching a national partnership to develop an integrated industry to produce power, fuels, and chemicals from crops, trees, and wastes. By making a "ton of biomass" a viable market competitor to a barrel of oil or a railroad car of coal, this initiative will help grow the U.S. economy, strengthen U.S. energy security, protect the environment, and revitalize rural America. This effort will integrate the efforts from existing DOE R&D in biomass power, transportation biofuels and the forest products and agriculture Industries of the Future to enable technologies that produce different combinations of power, fuels, chemicals and other products from different feedstocks in different areas of the country. It is only through the integration of these efforts that biomss will be an effective competitor to imported fossil fuels.

In FY 1999, the Administration launched the EnergySmart Schools initiative as part of an interagency effort to improve the nation's education resources. Under the leadership of EERE, EnergySmart Schools is a partnership that brings together public and private sector resources to reduce energy bills in our nation's schools and redirect the savings to our children and their education. Energy costs for the nation's schools amount to over \$7 billion annually. Most of our schools operate inefficiently, wasting resources that should be dedicated to education itself. EnergySmart Schools will help schools save up to \$1.5 billion in energy costs and 10 million metric tons of carbon emissions by 2010. EERE will use existing programs, including Rebuild America, Clean Cities, the President's Million Solar Roofs Initiative, the State Energy Programs, and Energy Star to provide technical assistance, technology demonstrations, guidance in financing mechanisms, and/or education in energy awareness in school districts around the country. In addition to reducing energy use, EnergySmart Schools will help to increase the use of clean energy technologies in existing schools and new school design. These measures will help to improve the learning environment of

classrooms and other school facilities through day lighting, better temperature control and air quality. Finally, the initiative will increase student, teacher and community awareness of energy and related issues, including financial management, air quality, climate change, and new technologies.

In FY 2000, the Department will accelerate the lighting and appliance energy efficiency standards program to realize even greater savings of energy, consumer energy costs, and air emissions. This acceleration will build upon recent progress in improving the standards-setting process. Improved analytics will enable early determination of consensus standards in some cases and accelerate the pace of the process in other cases. Additional funding will also enable the Department to consider standards for products and equipment for which statutory authority exists, but could not be pursued because of modest past budgets. This effort is a complement to voluntary programs such as Energy Star that encourage consumers and businesses to purchase energy efficient appliances and equipment.

Program Drivers

EERE's programs target Federal resources in key areas that provide critical national benefits; stimulate complementary private investments; leverage market forces; and respond to five significant drivers:

- National Security;
- Economic Competitiveness;
- Environmental Quality;
- Climate Change; and,
- Electricity Restructuring.

National Security

During the past 25 years, three major disruptions in the world oil market have shaken the global economy. In 1997, U.S. net oil imports accounted for approximately 49 percent of domestic petroleum consumption. By 2020, U.S. net oil imports are expected to grow to over 70 percent of domestic petroleum consumption, with Persian Gulf nations accounting for over 64 percent of the world's oil exports. In 2020, U.S. net annual expenditures for imported crude oil and products are projected to exceed \$180 billion in current dollars. Given historical precedents and future oil market trends, the United States has a critical interest in diminishing the nation's reliance on foreign oil through improved efficiency, EERE's efforts to implement a smart energy policy recognize this security concern and work to reduce U.S. dependence on foreign oil. As a related benefit, EERE's work on efficiency reduces the U.S. trade deficit by reducing costly energy imports.

Economic Competitiveness

In addition to reducing the nation's vulnerability to disruptions in energy supplies, EERE's research and development efforts advance U.S. economic interests. Carried out in partnership with industry, national laboratories, and universities, EERE's research and development programs are designed to maintain America's technological expertise and competitive advantage in the global market. A smart energy policy, as promoted by EERE's programs, strengthens the nation's economic power. EERE's investments not only lay the foundation for a more sustainable energy future but also open markets for U.S. manufacturers of advanced energy efficient technologies.

EERE's work with the nation's most energy-intensive and polluting industries results in productivity enhancements and savings in energy and environmental compliance costs. Energy is typically one of the most expensive elements of manufactured products. By cultivating clean and energy efficient industries, EERE is helping to assure the long-term competitiveness of U.S. industry. EERE technologies also lead to greater worker productivity through lighting and other work space improvements.

EERE also sponsors modest international programs to promote U.S. energy efficient technologies and services in international markets, to help ensure that U.S. companies are competitive in the large and growing global marketplace for energy efficiency and renewable energy technologies.

Environmental Quality

Air pollution, particularly in urban centers, ranks high among the nation's most pressing environmental concerns. In advancing a smart energy policy, EERE programs work to mitigate and minimize the environmental costs associated with energy use. By developing technologies that improve energy efficiency in industry and buildings, EERE's programs are concurrently identifying ways to reduce energy-related air pollutants. EERE's work on vehicle technologies will lead to greater fuel-efficiency as well as use of alternative fuels -- both offering impressive reductions in emissions.

Climate Change

The President's FY 2000 budget request for EERE programs is a major element of his proposal to invest \$5 billion over five years to reduce greenhouse gas emissions to below 1990 levels by 2008 - 2012 through energy technology research and development and tax incentives. In 1997, a major study conducted by five national laboratories documented the critical role that development and deployment of energy efficiency technologies can play in reducing greenhouse gases. Given the cost savings associated with these technologies, the study noted that aggressive investment in energy R&D and deployment could lead to significant emissions reductions without raising the nation's energy bill.

Electricity Restructuring

EERE is working with utilities, industry, states, and consumers to ensure that electricity restructuring results in a competitive and effective electric power industry. Power market restructuring presents an opportunity to reduce energy costs, advance the use of energy efficient technologies, and provide affordable services with reduced environmental impacts.

Managing Results

Since the beginning of FY 1998, the Department has put in place a new management team for the Office of Energy Efficiency and Renewable Energy (EERE). This new team has been resolving long-standing management issues and is committed to making further improvements. Specific reforms that have been accomplished in the past year as well as new initiatives are summarized below:

Strategic Planning for Results and Technology Roadmaps: Consistent with the Government Performance and Results Act, EERE is developing a new strategic plan with a focus on results. This plan builds on the technology roadmaps that the Department and the Office are developing. In addition, it will sharpen the Office's focus on procurement and business strategies that will improve the efficiency and effectiveness of operations.

Increasing Competition and Refining Merit Review Processes: EERE is increasing the amount of its program funds that are awarded on a competitive basis, and this approach is expected to improve the quality of the resulting work products. In 1998, the Department competed the roughly \$1 billion management and operating contract for the National Renewable Energy Laboratory, and the resulting contract strengthens the laboratory's management team and sharpens its mission focus.

During the past year, EERE also has issued a broad-based solicitation for proposals on information dissemination and outreach activities. This solicitation involves competitive applications for approximately \$13.5 million in work activities, much of which had been awarded on a non-competitive basis in the past. In 1998, the Office also issued a broad-based solicitation for research, development, and demonstration (RD&D) proposals and issued various targeted solicitations for proposals in specific technology areas.

In 1998, EERE also has refined its objective merit review processes through new regulations and additional guidance and training. These reviews of proposals by independent experts are expected to assure the selection of the highest quality projects.

Managing Smarter: EERE has made notable progress in reducing uncosted obligations. Since the beginning of FY 1996, we have reduced the uncosted balances in the Energy Efficiency Programs by nearly 53 percent, from a beginning balance FY 1996 of nearly \$678,000,000 to an ending FY 1998 balance of approximately \$319,000,000. While this represents substantial progress in addressing this Congressional concern,

EERE has taken steps toward further reducing uncosted balances. We are working to accelerate the obligation and costing of funds and we are also examining other steps that can reduce these balances without compromising sound management practices. EERE is also working with the National Academy of Public Administration to review and improve existing financial management systems. In addition, just like any good business, EERE has focused on assuring that it's workforce for the 21st Century includes adequate staff with necessary skills to manage long-term projects supported by recent budget increases.

Strengthening Program Integration: Since the solutions to our energy efficiency and renewable energy challenges cross sector lines, EERE is focusing increased attention on stimulating increased integration across technologies and across their applications. Two leading efforts are the Bioenergy Initiative and the EnergySmart Schools Initiative.

Leveraging Federal Investments by Expanding Partnerships with Federal, State and Other Entities: EERE is strengthening its partnerships with other government entities and the private sector to better leverage the Federal investment in RD&D and to facilitate the deployment of new technologies. These partnerships involve other components of the Department of Energy (the Offices of Fossil Energy, Nuclear Energy, and Science) and other Federal agencies. EERE also has begun an initiative with the States to establish a much closer working relationship with State organizations pursuing energy technology RD&D. EERE also works closely with national laboratories, businesses, universities, non-profit organizations, and the Congress to: set research and development priorities; conduct high-priority research; facilitate the deployment of technologies by the private sector, and disseminate information. In many cases, EERE activities are jointly funded with private sector or other public sector entities. EERE is also strengthening the role of its Regional Support Offices in delivering services at the state and local level.

Increasing Emphasis on Project Management: In 1999, EERE will place an increased emphasis on strengthening systems necessary to manage effectively the cost, schedule, and performance of projects. This emphasis is increasingly important as the Offices intensifies its role in demonstration projects.

Emphasizing Program Evaluation and Continuous Improvement: EERE is committed to following best business practices, which involve effective performance measurement and refinement of program strategies as new information is obtained. EERE has discontinued activities that have not met pre-determined goals and will continue to modify its strategies based on its program analysis and evaluation results.

FY 2000 Congressional Budget Request

In support of its priorities, EERE submits the following FY 2000 budget request. The table below covers both the Energy Conservation and Energy and Water Development Appropriations.

Office of Energy Efficiency and Renewable Energy FY 2000 Congressional Budget Request

| (in thousands of dollars) | | | | | |
|---|---------|-----------|--------------------|-------------------|--|
| | FY 1998 | FY 1999 | FY 2000 Request | Program Change | |
| Building Technology, State and Community Programs | 232,702 | 262,221 | 335,881 | 73,660 | |
| Federal Energy Management Program | 19,800 | 23,818 | 31,868 | 8,050 | |
| Industrial Technologies | 133,911 | 165,859 | 171,000 | 5,141 | |
| Transportation Technologies | 189,972 | 202,071 | 252,100 | 50,029 | |
| Policy and Management | 28,925 | 37,732 | 46,666 | 8,934 | |
| Solar and Renewable Resources Technologies | 294,351 | 336,000 | 398,921 | 62,921 | |
| Total Program Funding | 899,661 | 1,027,701 | 1,236,436 | 208,735 | |
| PODRA and Prior Year Balances | -45,403 | -64,000 | -821 | 63,179 | |
| Total Budget Authority ^a / | 854,258 | 963,701 | 1,235,615 | 271,914 | |

^a/ Total Budget Authority figures take into account prior year balances and projected receipts associated with the Petroleum Overcharge Distribution and Restitution Act (PODRA).

Program Performance Measures

The following long range goals provide the basis for EERE priorities under the Energy Conservation Account for FY 2000:

- Advance the Partnership for a New Generation of Vehicles goal of developing by 2004 prototype mid-sized cars, capable of 80 miles per gallon and two-third reductions in nitrogen oxides (NO_x) and carbon dioxide (CO₂) emissions, without compromising safety, comfort, performance, and cost.
- Develop advanced turbines that can reduce annual industrial energy costs by \$500 million and carbon emissions by nearly 1.7 million metric tons in 2010.
- By 2010, improve the efficiency of the nation's most energy intensive industries and reduce energy-related releases of carbon dioxide, sulfur oxides, nitrogen oxides, particulates, and other wastes by as much as 25 percent on a per-unit basis.
- By 2010, improve the energy efficiency of the nation's new homes by 50 percent; new commercial buildings by 30 to 50 percent; and existing buildings by 20 percent, compared to 1996 usage, and displace 2 quads per year with an energy cost saving of over \$13.5 billion.
- By 2005, improve energy efficiency in Federal buildings by 30 percent over 1985 levels.

Program Benefits

The table on the following page presents the estimated benefits of the Energy Efficiency Programs in terms of energy displaced, energy cost savings and reductions in carbon emissions. Estimates are derived through the Quality Metrics Methodology and are independently peer reviewed.

Office of Energy Efficiency and Renewable Energy Energy Efficiency Programs Projected Benefits by Sector through the Year 2020

| | | mary Energy I uadrillion BTU | _ | Energy Cost Savings (\$ billions)* | | Carbon Re | Carbon Reductions (million metric tons) | | |
|--|----------------------|---------------------------------|----------------------|------------------------------------|----------|-----------|---|-----------|-----------|
| | 2000 | 2010 | 2020 | 2000 | 2010 | 2020 | 2000 | 2010 | 2020 |
| Transportation Sector (oil savings in quads) | 0.01-0.07 (.0813) | 1.0-1.2 (1.6-1.8) | 1.7-3.0 (3.0-3.8) | 0.2-2.3 | 7.8-9.9 | 12.1-22.1 | 0.5-1.5 | 17.0-24.8 | 26.5-59.8 |
| Industry Sector | 0.1-0.2 | 0.8-1.5 | 2.1-4.4 | 0.5-1.2 | 3.5-6.0 | 7.3-16.2 | 2.6-5.2 | 16.7-29.4 | 43.6-92.8 |
| Building Technology, State & Community Sector | 0.07-0.09 | 1.4-2.3 | 2.4-5.7 | 0.5-0.7 | 9.5-16.1 | 16.5-38.7 | 1.3-1.4 | 25.3-35.9 | 51.9-82.3 |
| Federal Energy Management Program | 0.02 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.4 | 1.2 | 1.2 |

Note: The program benefit ranges are developed through an impact analysis process undertaken annually by the Office of Energy Efficiency and Renewable Energy (EERE). The upper point of each range is based on analysis conducted by EERE's sectors and externally reviewed by Arthur D. Little. The sectors analyze the impacts their programs will have on energy savings, cost savings, and carbon reductions if all program goals are met. The lower point of each range for energy displaced and carbon reductions is derived from an integrated analysis model run by external contractors that controls for interaction effects. The integrated analysis model accounts for inter- and intra-sector double-counting as well as market trends, including reductions in new electricity generation. The lower point of the energy cost savings range is calculated by multiplying the total primary energy displaced, derived from the integrated analysis, by the sector's energy cost savings/total primary energy displaced ratio for that year.

(Dollars in thousands)

| | FY 1998 | FY 1999 | FY 2000 |
|--|----------------|----------------|----------------|
| Program/Subprogram/Activity | Enacted | Enacted | Request |
| I. Building Technology, State, and | <u>232,702</u> | <u>262,221</u> | <u>335,881</u> |
| Community Sector, Total | | | |
| | | | |
| A. Building Research and Standards | <u>45,007</u> | <u>61.525</u> | <u>88,163</u> |
| Technology Road Maps and | 0 | 6,385 | 7,500 |
| Competitive R&D | | | |
| 2. Residential Buildings Integration | 8,741 | 9,582 | 13,538 |
| 3. Commercial Buildings Integration | 2,749 | 2,544 | 6,325 |
| 4. Equipment, Materials, and Tools | 33,517 | 43,014 | 60,800 |
| | | | |
| B. Building Technology Assistance | <u>174,877</u> | <u>187,525</u> | 232,400 |
| State Energy Program | 30,250 | 33,000 | 37,000 |
| 2. Weatherization Assistance Program | 124,845 | 133,000 | 154,000 |
| 3. Community Partnerships | 17,332 | 18,801 | 35,400 |
| 4. Energy Star Program | 2,450 | 2,724 | 6,000 |
| | | | |
| C. Management and Planning | 12,818 | <u>13,171</u> | <u>15,318</u> |
| Evaluation and Planning | 5,468 | 5,321 | 7,108 |
| 2. Program Direction | 7,350 | 7,850 | 8,210 |
| | | | |

(Dollars in thousands)

| | | FY 1998 | FY 1999 | FY 2000 |
|--------------------------------|--------------------|----------------|----------------|----------------|
| Program/Subprogram/Activity | | Enacted | Enacted | Request |
| II. Federal Energy Managem | ent Program, Total | <u>19,800</u> | <u>23,818</u> | <u>31,868</u> |
| | | | | |
| A. Project Financing | | 7,900 | 9,864 | 13,364 |
| B. Technical Guidance and A | Assistance | 6,300 | 7,454 | 10,204 |
| C. Planning, Reporting, and | Evaluation | 3,800 | 4,400 | 5,400 |
| D. Program Direction | | 1,800 | 2,100 | 2,900 |
| | | | | |
| III. Industry Sector, Total | | <u>133,911</u> | <u>165,859</u> | <u>171,000</u> |
| | | | | |
| A. Industries of the Future (S | Specific) | <u>52,156</u> | <u>57,456</u> | 74,000 |
| 1. Forest and Paper Pro | oducts Vision | 11,808 | 11,963 | 21,076 |
| 2. Steel Vision | | 9,547 | 10,527 | 10,627 |
| 3. Aluminum Vision | | 7,203 | 8,101 | 11,178 |
| 4. Metal Casting Vision | n | 5,391 | 5,743 | 5,797 |
| 5. Glass Vision | | 3,883 | 4,785 | 4,830 |
| 6. Chemicals Vision | | 11,384 | 12,375 | 12,492 |
| 7. Mining Vision | | 0 | 1,981 | 3,000 |
| 8. Agriculture Vision | | 0 | 1,981 | 4,000 |
| 9. Petroleum Refining | Vision | 2,940 | 0 | 1,000 |
| | | | | |

(Dollars in thousands)

| | FY 1998 | FY 1999 | FY 2000 |
|--|--------------|-----------------|-----------------|
| Program/Subprogram/Activity | Enacted | Enacted | Request |
| D. Industries of the Future (Crossoutting) | 74.055 | 100.052 | 97.600 |
| B. Industries of the Future (Crosscutting) | 74.055 | 100.052 | <u>87,600</u> |
| 1. Enabling Technologies | 14,182 | 19,218 | 22,000 |
| 2. Distributed Generation | 33,921 | 51,016 | 31,300 |
| 3. Financial Assistance | 10,757 | 10,699 | 12,000 |
| 4. Technical Assistance | 15,195 | 19,119 | 22,300 |
| | | | |
| C. Management & Planning | <u>7,700</u> | <u>8,351</u> | <u>9,400</u> |
| 1. Evaluation and Planning | 800 | 792 | 1,590 |
| 2. Program Direction | 6,900 | 7,559 | 7,810 |
| IV. Transportation Sector, Total | 189,972 | 202,071 | <u>252,100</u> |
| 11. Transportation Sector, Total | 107,772 | <u> 202,071</u> | <u> 252,100</u> |
| A. Vehicle Technologies R&D | 119,062 | 125,936 | <u>168,080</u> |
| Hybrid Systems R&D | 55,336 | 42,140 | 48,900 |
| 2. Fuel Cell R&D | 22,614 | 33,501 | 41,380 |
| 3. Advanced Combustion Engine R&D | 18,318 | 37,675 | 55,800 |
| 4. Cooperative Automotive Research for | 3,276 | 2,300 | 7,000 |
| Advanced Technologies | | | |
| 5. Electric Vehicle R&D | 17,818 | 8,820 | 11,000 |
| 6. Heavy Vehicle Systems R&D | 1,700 | 1,500 | 4,000 |

(Dollars in thousands)

| | FY 1998 | FY 1999 | FY 2000 |
|--|---------------|----------------|---------------|
| Program/Subprogram/Activity | Enacted | Enacted | Request |
| | | | |
| B. Fuels Utilization R&D | <u>17,024</u> | 17,785 | 23,500 |
| Advanced Petroleum Based Fuels | 2,900 | 6,615 | 12,400 |
| 2. Alternative Fuels | 14,124 | 11,170 | 11,100 |
| C. Materials Technologies | 33,870 | <u>37.475</u> | 33,000 |
| 1. Propulsion Materials Technology | 11,155 | 8,210 | 9,050 |
| 2. Lightweight Materials Technology | 17,615 | 23,825 | 16,950 |
| 3. High Temperature Materials Laboratory | 5,100 | 5,440 | 7,000 |
| D. Technology Deployment | 12,416 | 12,950 | <u>17,700</u> |
| 1. Clean Cities | 7,396 | 7,905 | 10,700 |
| 2. Testing and Evaluation | 2,795 | 2,920 | 4,000 |
| 3. EPACT Replacement Fuels Program | 1,375 | 1,285 | 2,000 |
| 4. Advanced Vehicle Competitions | 850 | 840 | 1,000 |
| E. Management and Planning | 7,600 | 7.925 | 9.820 |
| Technology Assessment and Analysis | 1,600 | 1,700 | 2,500 |
| 2. Program Direction | 6,000 | 6,225 | 7,320 |
| | | | |

(Dollars in thousands)

| | FY 1998 | FY 1999 | FY 2000 |
|---|---------------|---------------|---------------|
| Program/Subprogram/Activity | Enacted | Enacted | Request |
| V. Policy and Management - Total | <u>28,925</u> | <u>37,732</u> | <u>46,666</u> |
| | | | |
| A. Headquarters | <u>7.839</u> | <u>14,802</u> | <u>18,337</u> |
| Salaries and Related Expenses | 3,820 | 4,550 | 5,070 |
| 2. Contractual Services | 4,019 | 10,252 | 13,267 |
| B. Golden Field Office | 4,546 | 4,790 | 5,490 |
| Salaries and Related Expenses | 2,522 | 2,925 | 3,360 |
| 2. Contractual Services | 2,024 | 1,865 | 2,130 |
| C. Regional Support Offices | 12,390 | 13,990 | 17,489 |
| Salaries and Related Expenses | 8,244 | 9,630 | 10,120 |
| 2. Contractual Services | 4,146 | 4,360 | 7,369 |
| D. International Market Development Program | 2,600 | 2,600 | 3,600 |
| E. Information and Communications Program | 1,550 | 1,550 | 1,750 |
| R&D | 450,215 | 525,701 | 646,515 |
| ENERGY CONSERVATION GRANTS | 155,095 | 166,000 | 191,000 |
| | | | |

(Dollars in thousands)

| Program/Subprogram/Activity | FY 1998 <u>Enacted</u> | FY 1999 Enacted | FY 2000 Request |
|-------------------------------------|---------------------------|--------------------|--------------------|
| SUBTOTAL ENERGY CONSERVATION APPR. | 605,310 | 691,701 | 837,515 |
| Use of Prior Year Balances Interior | (345) | 0 | 0 |
| Subtotal | <u>604.965</u> | 691,701 | 837,515 |
| Financing: PODRA | (20,611) | (64,000) | 0 |
| TOTAL ENERGY CONSERVATION APPR. | 584,354 | 627,701 | 837,515 |

Climate Change Technology Initiative (CCTI) Departmental Crosscut

(dollars in thousands)

| | (| nars in mousur | | |
|-----------|--|---|--|--|
| FY 1998 | FY 1999 | FY 2000 | | |
| Actual | Enacted | Request | \$ Change | % Change |
| | | | | |
| | | | | |
| | | | | |
| \$269,904 | \$336,000 | \$398,921 | \$62,921 | 18.7% |
| 0 | 0 | 5,000 | 5,000 | 100.0% |
| 269,904 | 336,000 | 403,921 | 67,921 | 20.2% |
| | | | | |
| 0 | 13,500 | 33,000 | 19,500 | 144.4% |
| 0 | 13,500 | 33,000 | 19,500 | 144.4% |
| | | | | |
| 269,904 | 349,500 | 436,921 | 87,421 | 25.0% |
| | | | | |
| | | | | |
| 450,215 | 525,701 | 646,515 | 120,814 | 23.0% |
| 0 | 23,890 | 36,776 | 12,886 | 53.9% |
| | | | | |
| 0 | 2,500 | 3,000 | 500 | 20.0% |
| | | | | |
| 450,215 | 552,091 | 686,291 | 134,200 | 24.3% |
| | | | | |
| \$720,119 | \$901,591 | \$1,123,212 | \$221,621 | 24.6% |
| | \$269,904 0 269,904 0 269,904 450,215 0 450,215 | FY 1998 FY 1999 Enacted \$269,904 \$336,000 | FY 1998 Actual FY 1999 Enacted FY 2000 Request \$269,904 \$336,000 \$398,921 0 0 5,000 269,904 336,000 403,921 0 13,500 33,000 0 13,500 33,000 269,904 349,500 436,921 450,215 525,701 646,515 0 23,890 36,776 0 2,500 3,000 450,215 552,091 686,291 | FY 1998 Actual FY 1999 Enacted FY 2000 Request \$ Change \$269,904 \$336,000 \$398,921 \$62,921 0 0 5,000 5,000 269,904 336,000 403,921 67,921 0 13,500 33,000 19,500 0 13,500 33,000 19,500 269,904 349,500 436,921 87,421 450,215 525,701 646,515 120,814 0 23,890 36,776 12,886 0 2,500 3,000 500 450,215 552,091 686,291 134,200 |

(Dollars in thousands)

| D | (0.1 | FY 1998 | FY 1999 | FY 2000 |
|---------|--|-----------|-----------|-----------|
| Program | m/Subprogram/Activity | Enacted | Enacted | Request |
| I. | Building Technology, State, and | <u>76</u> | <u>75</u> | <u>73</u> |
| | Community Sector, Total | | | |
| | Headquarters | 76 | 75 | 73 |
| II. | Federal Energy Management Program, Total | 22 | 27 | <u>26</u> |
| | Headquarters | 22 | 27 | 26 |
| III. | Industry Sector, Total | 68 | 72 | <u>69</u> |
| | Headquarters | 58 | 61 | 59 |
| | Chicago Operations Office | 6 | 6 | 6 |
| | Idaho Operations Office | 4 | 5 | 4 |
| IV. | Transportation Sector, Total | 63 | <u>59</u> | <u>56</u> |
| | Headquarters | 62 | 58 | 55 |
| | Oak Ridge Operations Office | 1 | 1 | 1 |
| | | | | |

(Dollars in thousands)

| | FY 1998 | FY 1999 | FY 2000 |
|----------------------------------|------------|------------|------------|
| Program/Subprogram/Activity | Enacted | Enacted | Request |
| V. Policy and Management - Total | <u>190</u> | 208 | 202 |
| Headquarters | 51 | 53 | 48 |
| Golden Field Office | 29 | 32 | 31 |
| Regional Support Offices | 110 | <u>123</u> | <u>123</u> |
| Atlanta | 21 | 24 | 24 |
| Boston | 13 | 16 | 16 |
| Chicago | 15 | 19 | 19 |
| Denver | 22 | 25 | 25 |
| Philadelphia | 18 | 18 | 18 |
| Seattle | 21 | 21 | 21 |
| TOTAL ENERGY CONSERVATION APPR. | 419 | 441 | 426 |